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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/302,898 04/30/99 CAREN

M 10990105-5

EXAMINER

HM12/0718

IP ADMINISTRATION  
LEGAL DEPARTMENT 20BN  
HEWLETT-PACKARD COMPANY  
P O BOX 10301  
PALO ALTO CA 94303-0890

MARFONIEL, A PAPER NUMBER

1631  
DATE MAILED:

07/18/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/302,898

Applicant

Caren et al.

Examiner

Ardin Marschel

Group Art Unit

1631



☒ Responsive to communication(s) filed on Apr 25 2000

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-40 is/are pending in the application.

Of the above, claim(s) 19 is/are withdrawn from consideration.

☒ Claim(s) 18 is/are allowed.

☒ Claim(s) 1-3, 5-13, 25-27, 29-31, 39, and 40 is/are rejected.

☒ Claim(s) 4, 14-17, 20-24, 28, and 32-38 is/are objected to.

☒ Claims 1-40 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). (1 sheet)

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

Applicants' election without traverse of Group I (claims 1-18 and 20-40) in Paper No. 5, filed 4/25/00, is acknowledged.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-3, 5-13, 25-27, 29-31, 39, and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McGall (P/N 5,843,655).

McGall describes the preparation of polynucleotide arrays by a variety of synthetic means in column 4, line 13, through column 6, line 11, including deposition by ink jet which suggests droplet deposition as required in the instant claims. Various concerns regarding this process are then described starting in column 6 such as coupling efficiency, depurination which cleaves oligomers from the array, etc. Optical reading of labels etc. on the array surface for manufacturing evaluation is discussed starting in column 11, line 20, and continues through the examples. This evaluation of the fabrication of the arrays is deemed to motivate and suggest the comparison between the target or desired pattern of polynucleotides on the array and what actually has been fabricated as required in instant claim 1, part (d). These images are stored in a computer as noted in column 12, lines 65-67.

Thus, it would have been obvious to someone of ordinary skill in the art at the time of the instant invention to test array fabrication as performed in McGall to evaluate and thus compare desired or target versus actual patterns on the array surface as described above.

Claims 4, 14-17, 20-24, 28, and 32-38 are objected to as

being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 18 is allowed.

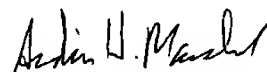
Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technical Center receptionist whose telephone number is (703) 308-0196.

July 17, 2000

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER